

Response to Comments Received
NTP Fact Sheet: *Radioactive Materials Shipping Regulations*

<i>Reviewer/Organization</i>	<i>Comment</i>	<i>Response to Comment</i>
ATR Institute, UNM	4 th Page: Under Emergency Preparedness, perhaps you should mention that the National Response Center is staffed by the U.S. Coast Guard.	Agree.
EM-76, DOE-HQ	<p>1st Page, 2nd Paragraph: IATA is a carrier association like ATA – the standards are established by ICAO.</p> <p>1st Page, 3rd Column, 2nd Paragraph: Hazardous material, including RAM, was regulated prior to HMTA – E&ODA Act of 1908.</p> <p>Same Paragraph, Last Sentence: Change “involved in the handling” to “who perform handling”.</p> <p>2nd Page, First Paragraph: Insert “(OSHA)”.</p> <p>2nd Page, 4th Paragraph, 1st Sentence: Change “The level of radioactivity” to “The required label”.</p> <p>4th Page, 2nd Paragraph: Delete “certain” from first sentence.</p> <p>In the next sentence, add Part 171.16.</p> <p>4th Page, 3rd Column, 1st Paragraph: Change “40 years” to “50 years”.</p>	<p>Agree. IATA deleted from text.</p> <p>True, but HMTA was first major legislation to establish broad hazmat rules.</p> <p>Done.</p> <p>Done.</p> <p>Agree.</p> <p>Agree. Change missed in editing; will be corrected next revision.</p> <p>Done.</p> <p>Done in response to earlier comment.</p>

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DOE Pittsburgh Naval Reactors Office	<p>1st Page, 3rd Column, 3rd Paragraph: Restructure the paragraph: “NRC regulates the nuclear material transport operations of NRC licensees, primarily commercial shippers of radioactive materials. For example, NRC establishes safeguards and security regulations to minimize the possibility of theft, diversion, or attack on certain shipments. NRC also establishes design and performance standards for casks used by all shippers that carry materials with higher levels of radioactivity.”</p> <p>All NRC requirements are detailed in the <i>Code of Federal Regulations, Title 10.</i>”</p> <p>2nd Page, 3rd Paragraph: Reword the first sentence: “Packaging standards required by DOT and NRC regulations for radioactive material are the primary means to protect people and the environment from radioactive material in transport.”</p> <p>2nd Page, 4th Paragraph: Insert a new second sentence: “These are referred to as hazard communication requirements.”</p> <p>In the next sentence, insert “an emergency response” before “identification number”.</p> <p>2nd Page, 5th Paragraph, 1st Sentence: Insert “for packaging purposes” after “The level of radioactivity is”.</p> <p>Replace “measured radiation levels of a package’s contents” with “the specific radioactive material characteristics called ??????? (illegible).</p>	<p>Disagree. Believe current text is clear.</p> <p>This is stated elsewhere in fact sheet.</p> <p>Reworded: “Radioactive materials packaging standards are the primary means to protect people and the environment during radioactive materials transport.”</p> <p>Modified first sentence to include “hazard communication”.</p> <p>Agree.</p> <p>Sentence has been reworded based on EM-76 comment.</p> <p>Comment illegible.</p>

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DOE/PNR (cont'd.)	<p>3rd Page, 2nd Column, 1st Paragraph: Not all HRCQ are spent nuclear fuel. Insert “high-level waste” after “(e.g.,”. Delete “spent nuclear fuel” within the parentheses.</p> <p>3rd Page, 2nd Column, 4th Paragraph, 1st Sentence: Reword: “Shipping papers provided by the shipper to the carrier provide more details about the characteristics than the label.”</p> <p>3rd Page, 2nd Column, 5th Paragraph: What about rail? In the second sentence, replace “Drivers” with “Carriers” and replace “in the vehicle” with “readily available”.</p> <p>4th Page, 2nd Column, 1st Paragraph: Insert “365 days a year” after “hours a day”. Delete “spectrometry”.</p> <p>4th Page, 2nd Column, 2nd Paragraph: Replace “(including DOE)” with “and DOE”.</p> <p>Delete the last sentence of this paragraph.</p> <p>4th Page, 3rd Column, 1st Paragraph, 3rd Sentence: Delete “vehicles carrying”.</p> <p>4th Page, 3rd Column, Last Paragraph: Delete “proper vehicle inspections” and insert “in those regulations” after “and rigorous training”.</p>	<p>Modified wording to include other materials.</p> <p>Modified wording to include shipper/carrier relationship.</p> <p>Agree.</p> <p>Agree.</p> <p>Agree.</p> <p>Agree.</p> <p>Reworded sentence.</p> <p>Agree (inspection is part of regulatory enforcement).</p>
Connecticut DEP/CRCPD	<p>More domestic than international, however, I believe that would be more appropriate.</p> <p>My information needs are more specific.</p>	<p>Agree. A separate fact sheet on International Regulations exists.</p> <p>This sheet was meant to deliver very basic information.</p>
Iowa Department of Public	As with most Federal documents, State coverage and	Coverage of SNF/HLW is included under “Prior

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Health	requirements are not covered, especially Agreement States. Some have notification requirements, etc. With State DOT getting into the Working Group, loads can be detained.	Notification” section. Wording modified to include HRCQ.
Association of American Railroads	<p>General: While it is not mentioned, all North American shipments by rail which are interchanged between carriers, must meet Association of American Railroads interchange rules. Equipment in interchange must meet <i>AAR Manual of Standards and Recommended Practice</i>.</p> <p>I am generally interested in more detailed information about rail. While this does me little good, it provides good background for a novice.</p>	<p>Text modified.</p> <p>Fact sheet intended to provide basic information.</p>
Nevada State Rail Safety Program Managers	<p>General: Although not mode specific, the product has a decidedly “highway” viewpoint, mostly a product of the language. Product uses terms such as “driver,” “in the cab of the vehicle,” “drivers of vehicles,” and “As with any traffic accident”.</p> <p>Need to provide a table listing each mode, Highway, Rail, Marine, Air, etc., and the appropriate CFR with the regulations for that mode.</p>	<p>Modified wording where possible. Changed “traffic accident” to “transportation accident”.</p> <p>Fact sheet meant to provide basic information. Will consider this comment for future rewrites.</p>
Contract Traffic Managers Association	<p>General: Not enough detail. May be appropriate for a general audience, but not nearly detailed enough for DOE contractors or first responders.</p> <p>1st Page, 1st Paragraph: Air transport standards are established by the <i>International</i> Air Transport</p>	<p>Basic information like CFR numbers are provided in the fact sheet to give those individuals who need more detailed information a starting point.</p> <p>Corrected.</p>
CTMA (cont’d.)	Association and the International Civil Aviation	

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CTMA (cont'd.)	<p>Organization. Insert “International” before “Air Transport”.</p> <p>1st Page, 4th Paragraph: The statement “DOT regulations also specify training needed by drivers and others involved in the handling and transport of radioactive materials” is misleading. It leads the audience to conclude some special training is required. In fact, the training requirements for shipments of radioactive materials is no different than the training for other hazardous materials. 49 CFR 172.704 covers the requirements for training. It is required that hazmat employees be given function-specific training and safety training and the training should cover the type of hazardous material being transported or handled, but we must be careful not to lead general audiences to a conclusion that individuals involved in the normal, everyday transportation of radioactive materials are somehow better trained than individuals transporting any other class of hazardous materials.</p> <p>2nd Page, Photos: While the packages shown are shown to indicate the various types of packaging, suggest the Type A package show the hazard class labels oriented “on point.” Also look carefully at the corrosive label. It appears to have the “8” on the label. This would not be correct, since the Class “7” label would be the primary hazard and the class “8” would indicate a subsidiary hazard. There also does not appear to be any label on the Type B package. The trailer for the Type B package also seems to have a tarp or something which is unsecured on the floor of the trailer. Use the best picture(s) you can</p>	<p>Changed “radioactive” to “hazardous”.</p> <p>Replaced photo to show label on-point and to remove corrosive label. Type B photo replaced.</p>

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	<p>obtain and make certain there are no glaring DOT violations in the pictures.</p> <p>3rd Page, Labels: Need to change the information concerning the Activity Line. Must now give the level of radioactivity in appropriate SI units. Expressing activity solely in terms of curies not allowed since April 1, 1997. (See 49 CFR 172.403(g)(2).)</p> <p>3rd Page, Routing: See 49 CFR 173.457. Either the carrier or the offeror of the shipment determines the preferred route to be used.</p>	<p>Corrected.</p> <p>Added “offeror” to text.</p>
DOE Nevada Opns. Office	<p>1st Page, 2nd Paragraph: Change ICAO reference to IATA.</p> <p>Add FAA.</p>	<p>IATA is a carrier association. ICAO develops standards and regulations.</p> <p>Reference added.</p>
DOE NV Contractor	<p>1st Page: Insert “hazardous and” before “radioactive materials” in the caption.</p> <p>1st Page, 3rd Column, 2nd Paragraph, 3rd Sentence: Insert “placarding” before “loading”.</p> <p>1st Page, 3rd Column, Last Paragraph: Correct spacing.</p> <p>2nd Page, 3rd Paragraph: Correct spacing.</p> <p>In second sentence, insert “material” before identification number.</p> <p>3rd Page, 2nd Paragraph: Delete first “the”. Same comment for 2nd Paragraph under Shipping Papers.</p>	<p>The fact sheet is focused on radioactive materials.</p> <p>Done.</p> <p>Corrected.</p> <p>Corrected.</p> <p>Wording changed in response to earlier comment.</p> <p>Done.</p>
DOE NV Contractor	<p>4th Page, Photo: Use arrows, as picture not clear.</p>	<p>Printed copies will have improved clarity.</p>

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(cont'd.)	General: 40 CFR not addressed, but EPA was included; also OSHA 29CFR.	49 CFR and 10 CFR listed because DOT and NRC have primary responsibility.
State of Oregon	<p>General: Don't use acronyms in the captions. People may just glance at the caption and may not know the acronym.</p> <p>1st Page, 1st Column: There should be some mention that certain shipments – like nuclear weapons components – are not required to meet all DOT/NRC regulations, such as placarding.</p> <p>2nd Page: Rewrite caption. The fact that more stringent packaging requirements are required for more hazardous materials is more important than packaging type is based on activity, type, etc.</p> <p>2nd Page, 4th Paragraph, Last Sentence: Find a different word than “excepted.” Perhaps “not required to”?</p> <p>3rd Page, Graphics: Label shows TBq; caption says curies.</p> <p>3rd Page, Caption: Is this still the case, or only for non-fissile?</p> <p>3rd Page, 2nd Column, Last Paragraph: Who receives this written plan?</p>	<p>Space limitations in many captions restrict spelling out complete names. All acronyms used in captions in this product are spelled out in the text on the same page and can easily be found by the reader.</p> <p>Reference added.</p> <p>Second sentence dropped from caption.</p> <p>Changed word to “excluded”.</p> <p>Corrected.</p> <p>Clarified by adding non-fissile regulatory reference.</p> <p>Reworded to indicate NRC receives the plan.</p>
State of Oregon (cont'd.)	3 rd Page, 3 rd Column, 2 nd and 3 rd Paragraphs: All of a	This section addresses routing. Other sections are

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	<p>sudden, the text mentions rail and then oceanic. It raises the question whether all previous information is applicable to rail as well (and barge/ship).</p> <p>3rd Page, 3rd Column, 5th Paragraph: Does DOE notify for HRCQ and spent fuel?</p> <p>4th Page, 2nd Column, 4th Line: Will a lay person understand this term?</p> <p>4th Page, 2nd Column, 2nd Paragraph: What are typical or minimum insurance requirements?</p> <p>4th Page, 3rd Column, 5th Line: Replace “40 years” with “50 years.”</p>	<p>applicable to all modes of transport.</p> <p>Wording added to indicate NRC is in process of changing the regulatory requirement to include Tribes under the notification rule.</p> <p>“Spectrometry” deleted from text.</p> <p>Wording changed to indicate carriers are required to maintain at least \$5 million in liability coverage.</p> <p>Agree.</p>
Council of State Governments, Mid-West	<p>Pg. 3: Reference to DOE’s policy on notifying Tribes: Perhaps mention DOE’s attempts to gain NRC approval of the policy? Otherwise, the reader might conclude that DOE is violating NRC regulations by notifying the Tribes.</p> <p>Also FAX is not an acronym; NTP listing on back says “HomePage,” whereas others say “Website.”</p>	<p>Wording added to indicate NRC is in process of changing the regulatory requirement to include Tribes under the notification rule.</p> <p>Agree.</p>
PA Emergency Management Agency (PEMA)	<p>General: I think these concisely written, subject specific handouts are excellent. I have often used them when I teach radiological courses in Pennsylvania.</p> <p>Reviewer’s copy of poor quality.</p>	<p>No response required.</p> <p>Resulted from copying from xeroxed copy.</p>
State of New Mexico State of New Mexico (cont’d.)	<p>Last Page, 5th Paragraph, 1st Sentence: Under <u>Emergency Preparedness</u>, add the word “the” after “are” and before “first”. Without “the” it could sound like a directive – first they are to respond to radioactive accidents, rather</p>	<p>Agree.</p>

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	than they are the first responders on the scene.	
Western Governors' Association	1 st Page, 1 st Paragraph: The fact sheet discusses that "DOE administers its shipments according to a series of Departmental Orders and other internal guidance." It is recommended that the fact sheet list at least the key Orders and guidance which apply; you may also want to mention how the "Program Manager's Guide to Transport Planning" is provided for use.	Added wording to explain that DOE Orders are written requirements. Don't believe it is necessary to include specific numbers at this time. The "Program Manager's Guide" is not a regulatory requirement.

NOTE:

- "No Comment" responses received from: Indiana SEMA, DOE, Richland Operations Office, Texas State Energy Conservation Office, Pantex Program, State of Colorado, and the IAFC.